

ADDENDUM NUMBER 1 TO THE BID DOCUMENTS

Addendum Date: **November 18, 2019**

BID DOCUMENT:

City of Troutdale 2019 Well No. 2 Maintenance Program

A. This Amendment shall be considered part of the bid documents for the above-mentioned project as though it had been issued at the same time and shall be incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original bid documents, this Addendum shall govern and take precedence. BIDDERS MUST SIGN THE ADDENDUM AND SUBMIT IT WITH THEIR BIDS.

B. Bidders are hereby notified that they shall make any necessary adjustments in their estimates as a result of this Addendum. It will be construed that each bidder's proposal is submitted with full knowledge of all modifications and supplemental data specified herein.

Except as described below, the original bid document remains unchanged. The bid documents are modified and/or clarified based on questions asked by attendees or additional information provided by City Staff at the pre-bid site (optional) walk on November 15, 2019, as follows:

Item No. 1

This bid date is extended to Tuesday November 26, 2019 at 2:00pm. The place and persons receiving the bids remain the same.

Item No. 2

Added **Section 4008 – Well Disinfection**. This section was previously omitted during final document production. This section is applicable for development of costs in Line Item No. 12 in the Bid Form Schedule A.

Item No. 3

The following clarification is made to **Section 4002 Solids and Water Management** as follows:

The primary option for discharge to the County is at the storm sewer as indicated in the bid documents (see Figure 1) for all required tasks. A secondary option for discharge in the event of including optional task **Fluid Impulse Generation** (line Item No. 7) will be to the pump-to-waste system in the wellhouse. The City of Troutdale will coordinate all permitting required for discharge management with Multnomah County and/or the City of Gresham. Management of solids and chlorinated water will be performed as described in Sections 4002 and 4008. Any additional requirements for discharge water quality to the system will be addressed prior to the start of work at the kick off meeting.

Item No. 4

Bid Form Schedule A Line Item Item No. 9 should be modified to “Provide **1.5**-inch PVC Sch 80 Casing from “Provide 1-inch PVC Sch 80 Casing”. As noted elsewhere in the bid documents the actual size that can be installed will be dependent on observed

dimensions of the pump column. For cost estimation purposes the **1.5-inch** Sch 80 PVC should be assumed.

Item No. 5

The City of Troutdale will perform any necessary clearing or limbing of trees near the wellhouse to allow unimpeded overhead access of all necessary equipment, the pump hoist or other equipment needed to pull and reinstall the pump, column and motor.

Item No. 6

The City will be performing additional modifications and upgrades to the discharge piping at Well No. 2. The City will be responsible for making the final connections of the pump discharge, electrical controls and appurtenances to the system.

Item No. 7

Inspecting of the pump, motor and column is described in **Section 4003 – Pump Removal** and included as Line Item No. 5. Any required replacement, maintenance or upgrades of the existing pump, column or motor would be provided by the contractor. The City would address those recommendations in a change order for the contractor to furnish, install and/or perform the required maintenance, repair and replacement of equipment and would be executed as approved by the City or their representative as part of reinstallation of the pumping system described in **Section 4007 – Pump Installation**.

If you have additional questions, please contact Christopher Augustine, RG, SCS Engineers, 15940 SW 72nd Avenue, Portland, Oregon 97224 or at 503-430-3030 or caugustine@scsengineers.com
Please copy all electronic correspondence to nick.massey@troutdaleoregon.gov and david.schaffer@troutdaleoregon.gov.

BIDDER MUST ACKNOWLEDGE THIS AMENDMENT BY SIGNING BELOW AND ATTACHING THE SIGNED AMENDMENT TO THE BID FORM:

Company Name _____

Contact Person _____

Signature _____

Date _____

Section 4008 – Super Chlorination and Disinfection

Description

4008.00 Scope - This item includes the work necessary to super-chlorinate and disinfect the well after the permanent pump and other equipment has been installed. Permanent equipment that will be installed in the well shall be disinfected in accordance with AWWA C654-13 and Oregon Health Authority guidance.

Materials

4008.10 General - Provide all temporary and permanent materials, equipment, and labor required to accomplish the work as specified.

(a) Sodium hypochlorite – Sodium hypochlorite shall be delivered to the work site in the original closed containers bearing the original label indicating the percentage of available chlorine and date of manufacture. Sodium hypochlorite shall not be more than 1 month old and will be NSF/ANSI 60 approved. Calcium hypochlorite or other commercially available disinfectants will not be allowed.

(b) Chlorine enhancer – A pH lowering additive will be added to the disinfection solution to lower the pH of the solution to a pH between 5.5. to 6.5. If a specially blended product disinfection is used it must be NSF/ANSI 60 approved and approved by the Owners Representative.

(c) Chlorine Neutralizer – A granular or tablet dichlorination product will be provided to neutralize spent disinfection solution prior to discharge to the storm water system. The Contractor will have enough dechlorination product onsite to treat the equivalent of 2 standing well volumes with a concentration of 50 ppm residual chlorine. The dechlorination product must be NSF/ANSI 60 approved for water or wastewater applications.

Construction

4008.40 General – The disinfection will be performed after all of the in-well work is completed including all redevelopment tasks, final well video survey, and reinstallation of the pump, motor, column and appurtenances.

(a) Unless superseded by Local, State, and Federal regulations, the quantity of sodium hypochlorite added to the well shall be sufficient to produce a minimum of 200 ppm available chlorine when mixed with 1.5 times the total volume of standing water in the well. The total volume of water includes the water in the gravel pack.

(b) The sodium hypochlorite disinfectant solution shall be injected into the well through the camera access port that reaches.

(c) After all the disinfectant is injected into the well, the pump motor and well shall be turned on and water redirected into the well to disinfect the casing, wiring and pump column and to mix and disperse the disinfectant solution within the standing water column.

(d) The disinfecting agent shall be left in the well for a minimum of 12 hours but no more than 24 hours.

(e) Following the 12 to 24 hour contact time, a pressure-tight connection at least 1.5-inches in diameter (but not larger than the discharge piping) shall be made from the pump discharge piping to the downhole access port.

(f) Following installation of the connection between the discharge piping and the access port, the pump shall be operated against a throttled discharge valve to return a flow of down the well casing while the rest of the pumped water is discharged to the collection system.

(g) The Contractor shall measure and record the chlorine residual with a field kit every 30 minutes until no chlorine residual is detectable. The field kit shall have a detection limit of 1 ppm.

(h) Once the residual chlorine is below the 1 ppm concentration, the Contractor will discharge the spent disinfection solution to the storm or sanitary water system or dispose of by land application area as directed by the Owner or the Owner's representative.

Measurement

4008.80 Measurement – No measurement of quantities will be made for work performed done under this section.

Payment

4008.90 Payment - Payment for this item and accepted quantities of work will be made at the lump sum price stated in the Contractor's Bid for "Super-Chlorination Disinfection"

The total amount for this item in the Contractor's Bid is on a lump sum per well basis.

Payment will be in full for furnishing all equipment, materials, labor and incidentals necessary to complete the work as specified.

END OF SECTION